

Overview of the IAEA Joint Convention and Implementation Status of the Obligation as the Contracting Party of the 5th Joint Convention

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1. Introduction

The Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (Joint Convention) was adopted on 5 September 1997 by a Diplomatic Conference convened by the International Atomic Energy Agency (IAEA). The Joint Convention was opened for signature at Vienna in September 1997 and will remain open for signature until its entry into force [1].

Korean government signed the Joint Convention in 1997 and this Convention was effective in 2002 as the Convention No. 1612. This paper will show overview of the Joint Convention and implementation status of the obligation as a Contracting Party of the 5th Joint Convention.

2. Overview of the Joint Convention

In this section, the objective, application scope and members of the Joint Convention are described. And the obligation as the Joint Convention contracting party is also described.

2.1 Objective of the Joint Convention

According to Rules of the Joint Convention, the objectives of this Convention are:

(i) to achieve and maintain a high level of safety worldwide in spent fuel (SNF) and radioactive waste (RW) management, through the enhancement of national measures and international cooperation;

(ii) to ensure that during all stages of SNF and RW management there are effective defenses against potential hazards so that individuals, society and the environment are protected from harmful effects of ionizing radiation, now and in the future;

(iii) to prevent accidents with radiological consequences and to mitigate their consequences should they occur during any stage of SNF or RW management [1]

2.2 Application scope of the Joint Convention

According to Rules of the Joint Convention, the Joint Convention shall apply to the safety of SNF and RW management from the operation of civilian Nuclear Power Plants (NPPs). SNF held at reprocessing facilities as part of a reprocessing activity is not covered in the scope of The Joint Convention unless the Contracting

Party declares reprocessing to be part of SNF management. However, this Convention shall not apply to waste that contains only naturally occurring radioactive materials and that does not originate from the nuclear fuel cycle, unless it constitutes a disused sealed source or it is declared as RW for the purposes of this Convention by the Contracting Party.

The Joint Convention shall not apply to the safety of management of SNF or RW within military or defense programs, unless declared as SNF or RW for the purposes of this Convention by the Contracting Party. However, this Convention shall apply to the safety of management of SNF and RW from military or defense programs if and when such materials are transferred permanently to and managed within exclusively civilian programs [1].

2.3 Members of the Joint Convention

On January, 2016, the number of the Joint Convention contracting parties is 69. These contracting parties are composed of 68 countries including the Korea (Republic of), USA, China, Japan, France, Sweden, Finland, South Africa and UAE, etc., and 1 international agency, EURATOM.

2.4 Obligation as the Joint Convention contracting party

The Joint Convention contracting parties shall attend the Organization Meeting [2, 3]. The Organization Meeting is meeting for electing the President and Vice-Presidents, and Group-Chairpersons, Group-Vice-Chairpersons, Group-Coordinators and Group-Rapporteurs.

After attending the Organization Meeting, all contracting parties shall submit the National Report. This National Report shall be written following 'Guidelines regarding the Form and Structure of National Reports (INFCIRC 604) [4]'. According to INFCIRC 604, the National Report shall include 12 items and 12 items are composed of introduction, policies and practices, scope of application, inventories and lists, legislative and regulatory system, other general safety provisions, safety of SNF management, safety of RW management, trans boundary movement, disused sealed sources, general efforts to improve safety, and annexes.

After submitting the National Report, all contracting parties shall submit the question paper regarding other contracting parties' National Report [3]. In this stage, all contracting parties are able to review and check

regarding other contracting parties' safety management system for SNF and RW.

After submitting the question paper regarding the National Report, all contracting parties shall submit the answer paper regarding the question paper from other contracting parties [3]. In this stage, all contracting parties are able to review and check regarding their own safety management system for SNF and RW.

After submitting the answer paper, all contracting parties shall attend the Review Meeting [2, 3]. The Review Meeting is composed of Plenary Session and Group Session. In this Review Meeting, each contracting party shall present their safety management system for SNF and RW during maximum 4 hours.

These all processes are repeated every three years.

3. Implementation Status of the Obligation as the Contracting Party of the 5th Joint Convention

As a contracting parties of the Joint Convention, Korean government has conducted obligation of this Convention since becoming contracting parties.

For the 5th Organization Meeting (May 2014), Korean government dispatched the delegation which was composed of the Nuclear Safety and Security Commission (NSSC), Ministry of Foreign Affairs (MOFA), Korea Institute of Nuclear Safety (KINS), etc.. Korean representatives were elected as Vice-Presidents and Group-Coordinators.

After attending Organization Meeting, Korean government submitted the National Report (October 2014) [5], question paper (101 counts, February 2015) and answer paper (77 counts, April 2015). For submitting the qualified National Report, question paper and answer paper, the Joint Convention Task Force Team (TFT) was formed, and this team was composed of the experts from the NSSC, KINS, Korea Hydro and Nuclear Power Co., Ltd (KHNP), Korea Radioactive Waste Agency (KORAD), KEPCO Nuclear Fuel (KNF), Korea Atomic Energy Research Institute (KAERI), and other institutes.

Korean government also dispatched the delegation which was composed of the NSSC, MOFA, KINS, KHNP, KORAD, KNF, and KAERI for the 5th Review Meeting (May 2015). In this Review Meeting, Korea delegation presented the safety management system of SNF and RW (during 90 minutes) and had oral question and answer sessions (during 120 minutes). Total 17 contracting parties (Canada, Sweden, UAE, UK, USA and Denmark, etc.) took part in Korea presentation and there were about 20 oral questions from these contracting parties. Especially, questions were focused on the Public Engagement Commission on Spent Nuclear Fuel Management (PECOS), SNF management time schedule and disposal facility for low and intermediate level radioactive waste (LILW).

Apart from Korea presentation, Korea delegate attended presentations of SNF and RW management leading contracting parties (12 countries; USA, France, Spain, Switzerland, Japan, Finland, Sweden, UK, Russia, China, Germany, and Canada). Korea delegate could

collect the information on resident participation system from Switzerland, decommissioning technique and regulation from Germany and UK, disposal technique and regulation of RW and SNF from Finland and Sweden.

The 6th Organization Meeting and 6th Review Meeting will be held in May 2017 and in May 2018. Following rules of the Joint Convention, all contracting parties, including Korean government, shall attend both meeting and shall submit National Report (until October 2017), question paper (until February 2018) and answer paper (until April 2018). Korea government will prepare the obligation conduction of the 6th Joint Convention through forming the Joint Convention TFT.

4. Conclusions

The Joint Convention is the inter-national convention organized by the IAEA. All contracting parties shall comply with rules of the Joint Convention and conduct the obligation of this convention.

Korean government successfully conducted all obligation (attending Organization Meeting and Review Meeting, submitting paper including National Report, question paper and answer paper) of the 5th Joint Convention from May 2014 to May 2015, and will prepare the obligation of the 6th Joint Convention.

REFERENCES

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